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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/525,966	03/15/2000	Peter S. S. Wang	3COM 2534-1	1024

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HAYNES BEFFEL & WOLFELD LLP
P O BOX 366
HALF MOON BAY, CA 94019

EXAMINER

BAROT, BHARAT

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/525,966

Applicant(s)

WANG ET AL.

Examiner

Bharat N Barot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RESPONSE TO AMENDMENT

The old rejection maintained

1. The rejection is respectfully maintained as set forth in the last Office Action (Paper Number 06) mailed on April 30, 2003.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-62 are rejected under 35 U.S.C. 102(e) as being anticipated by Locklear, Jr. et al (U.S. Patent No. 6,252,878). Locklear's patent meets all the limitations for claims 1-62 recited in the claimed invention.
4. As to claim 1, Locklear, Jr. et al teach a method of virtually addressing a plurality of storage devices through a switch (figures 2 and 4), including the steps: establishing a file session between a client and the switch, wherein the switch appears as a virtual storage device (column 5 lines 1-36; and column 7 lines 15-52); selecting in the switch one of a plurality of storage devices coupled with the switch to participate in the file session (column 5 lines 37-58; and column 7 lines 53-67); and programming logic in the switch to forward packets in the file Session to the selected storage device (column 4 lines 13-33; and column 8 lines 1-13).

5. As to claim 2, Locklear, Jr. et al teach that the client having TCP logic to participate in a file session recognizes the switch as a virtual storage device without modification of the TCP logic (figures 3A and 3C; column 3 lines 23-35; column 5 line 59 to column 6 line 21; and column 6 line 50 to column 7 line 14).

6. As to claims 3-5, Locklear, Jr. et al teach that the virtual storage device conforms to the different type of protocols (column 3 lines 23-35).

7. As to claim 6, Locklear, Jr. et al teach a step of: selecting one of a plurality of storage devices includes inspecting data transmitted with a file session packet and selecting the storage device responsive to said data (column 5 lines 47-58; and column 8 lines 1-13).

8. As to claims 7-9, Locklear, Jr. et al teach that the switch includes a file directory and selecting one of a plurality of storage devices includes inspecting data transmitted with a file session packet and accessing the file directory to select the storage device responsive to said data, hosting a file responsive said data, and having characteristics responsive to said data (figure 2; column 3 line 66 to column 5 line 45).

9. As to claim 10, Locklear, Jr. et al teach the steps of: determining in the selected storage device to redirect the file session to an other ~device; handing off the file session to an other storage device-, and reprogramming the switch to forward packets in the file session to the other storage device (figure 4; and Column 7 lines 26-52).

10. As to claim 11, Locklear, Jr. et al teach that handing off the file session and reprogramming the switch are transparent to the client (column 5 lines 1-58; and column 7 line 53 to column 8 line 13).

11. As to claim 12, Locklear, Jr. et al teach that at least one of the plurality of storage devices coupled with the switch is an other switch configured to appear as a virtual storage device (figure 1; and column 2 line 54 to column 3 line 53).

12. As to claims 13-24, they are also rejected for the same reasons set forth to rejecting claims 1-12 above. Additionally, Locklear, Jr. et al teach the steps of: inserting a switch between the storage devices and the network, wherein the switch appears as a virtual storage device (figure 1; and column 2 line 54 to column 3 line 53); and accepting in the switch a request to establish a file session between a client and the switch (figure 2; and column 5 lines 1-58).

13. As to claims 25-33, they are also rejected for the same reasons set forth to rejecting claims 1-9 above.

14. As to claims 34-40, they are also rejected for the same reasons set forth to rejecting claims 1, 3-5, and 10-11 above. Additionally, Locklear, Jr. et al teach a step of: predicting in a switch coupled to a first storage device that the failure of the first storage device will require a fail over (column 5 line 59 to column 6 line 6 line 21; and column 7 lines 27-52); and disclose that the switch comprises one or more input processors, logic to process packets, switch fabric, a forwarding table and one or more output processors (figures 1-2; and column 3 line 54 to column 4 line 67).

15. As to claims 41-47, they are also rejected for the same reasons set forth to rejecting claims 34-40 above.

16. As to claims 48-55, they are also rejected for the same reasons set forth to rejecting claims 1 and 10-11 above. Additionally, Locklear, Jr. et al teach the steps of: determining in a first device coupled to a switch that the work load of the first device warrants a session transfer and determining in a switch coupled to a first device that the work load of the first device warrants a session transfer (column 4 line 53 to column 5 line 58)-, and disclose that the switch comprises one or more input processors, logic to process packets, switch fabric, a forwarding table and one or more output processors (figures 1-2; and column 3 line 54 to column 4 line 67).

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17. As to claims 56-62, they are also rejected for the same reasons set forth to rejecting claims 1, 3-5, and 10-11 above. Additionally, Locklear, Jr. et al teach a method of load balancing between a first switch involved in a file session to a second switch, the first and second switches being connected to a plurality of storage devices, including the steps: determining in a first switch coupled to a second switch that a file session involving the first switch should be handled by the second switch; handing off the file session to the second switch; and reprogramming the first switch to forward packets in the file session to the second switch (figure 1; and column 2 line 54 to column 3 line 53); and disclose that the switch comprises one or more input processors, logic to process packets, switch fabric, a forwarding table and one or more output processors (figures 1-2; and column 3 line 54 to column 4 line 67).

Response to Arguments

18. Applicant's arguments with respect to claims 1-62 filed on January 16, 2004 (Paper Number 07) have been fully considered but they are not deemed to be persuasive for the claims 1-62.

19. In the remarks, the applicant argues that:

- a. Argument: Locklear, Jr. et al. does not anticipate claim 1.

Response: Locklear, Jr. et al teach a method of virtually addressing a plurality of storage devices (106) through a switch (104) (figures 2 and 4), including the steps: establishing a file session between a client and the switch, wherein the switch appears as a virtual storage device (columns 4-5); selecting in the switch one of a plurality of storage devices coupled with the switch to participate in the file session (columns 5 and 7); and programming logic in the switch to forward packets in the file Session to the selected storage device (columns 4 and 8).

- b. Argument: There is no mention of TCP.

Response: Locklear, Jr. et al teach disclose the TCP and teach the modification of the TCP logic (column 3).

- c. Argument: There is no anticipation to redirect the file session to an other device.

Response: Locklear, Jr. et al teach the steps of: determining in the selected storage device to redirect the file session to an other device (figure 4 and Column 7).

2. This action is made final. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

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A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Contact Information

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bharat Barot whose telephone number is (703) 305-4092. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, can be reached at (703) 308-6662. A central official fax number is (703) 872-9306.

Any inquiry of general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-3900.

Patent Examiner Bharat Barot

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March 24, 2004

Bharat Barot
BHARAT BAROT
PRIMARY EXAMINER